



SEQUENCE LISTING

<110> Goulmy, Els A.J.M.  
Hunt, Donald F.  
Engelhard, Victor H.

<120> HA-1 epitopes and uses thereof

<130> 2183-6047US

<140> 10/623,176

<141> 2003-07-18

<150> 09/489,760

<151> 2000-01-21

<150> EP 97202303.0

<151> 1997-07-23

<150> PCT/NL98/00424

<151> 1998-07-23

<150> JP 2000-504165

<151> 2000-01-24

<160> 77

<170> PatentIn Ver. 2.1

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wherein X can be R or H

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Lys Glu Cys Val Leu Xaa Asp Asp Leu  
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capable of binding HLA-A2.1

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can be I or L

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Tyr Xaa Thr Asp Arg Val Met Thr Val

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peptide candidate m/z 513 wherein X can be L or I

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Val Xaa His Asp Asp Xaa Xaa Glu Ala

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33

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<222> (1)..(30)

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<210> 23

<211> 9

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Glu Cys Val Leu Arg Asp Asp Leu Leu

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5

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wherein X can be H or R

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Val Leu Xaa Asp Asp Leu Leu Glu Ala Arg

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5

10

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32

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39

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27

<210> 28

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<210> 29

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21

<210> 30

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<210> 31

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Arg

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<210> 35  
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Glu Lys Leu Lys Glu Cys Val Leu Arg  
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<210> 36  
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<220>  
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Lys Leu Lys Glu Cys Val Leu His Asp  
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<210> 37  
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Lys Leu Lys Glu Cys Val Leu Arg Asp  
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<210> 38  
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1 5

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<220>

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Cys Val Leu Arg Asp Asp Leu Leu Glu  
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<210> 43

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<212> PRT

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<223> Description of Artificial Sequence: HA-1 peptide

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<221> SITE

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<210> 44

<211> 10

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His Asp Asp Leu Leu Glu Ala Arg Arg  
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<210> 49  
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long HA-1 peptide

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Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu Ala  
20 25

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<220>  
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Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu  
1 5 10

<210> 51  
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<220>  
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<220>  
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<400> 51  
Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu  
1 5 10 15



Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly  
20 25

<210> 52  
<211> 19  
<212> PRT  
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<220>  
<223> Description of Artificial Sequence: HA-1 peptide

<220>  
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<222> (1)..(19)

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His Asp Asp Leu Leu Glu Ala Arg Arg Pro Arg Ala His Glu Cys Leu  
1 5 10 15

Gly Glu Ala

<210> 53  
<211> 22  
<212> PRT  
<213> Artificial Sequence

<220>  
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<220>  
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<222> (1)..(22)

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Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu  
1 5 10 15

Ala Arg Arg Pro Arg Ala  
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<210> 54  
<211> 13  
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<220>  
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<222> (1)..(13)

<400> 54

Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu  
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<210> 55

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HA-1 peptide

<220>

<221> SITE

<222> (1)..(25)

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Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu  
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys  
20 25

<210> 56

<211> 12

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: HA-1 peptide

<220>

<221> SITE

<222> (1)..(12)

<400> 56

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp  
1 5 10

<210> 57

<211> 17

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HA-1 peptide

<220>

<221> SITE

<222> (1)..(17)

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Gly Leu Glu Lys Leu Lys Glu Cys Val Leu His Asp Asp Leu Leu Glu  
 1 5 10 15

Ala

<210> 58  
 <211> 10  
 <212> PRT  
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<220>  
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<210> 59  
 <211> 29  
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<220>  
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 long HA-1 peptide

<220>  
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 <222> (1)..(29)

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 Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
 1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu Ala  
 20 25

<210> 60  
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Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly  
20 25

<210> 61

<211> 28

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HA-1 peptide

<220>

<221> SITE

<222> (1)..(28)

<400> 61

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys Leu Gly Glu  
20 25

<210> 62

<211> 14

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HA-1 peptide

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<222> (1)..(14)

<400> 62

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu  
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<210> 63

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: HA-1 peptide

<220>

<221> SITE

<222> (1)..(22)

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1 5 10 15

Ala Arg Arg Pro Arg Ala  
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<210> 64  
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Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu  
1 5 10

<210> 65  
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<220>  
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<220>  
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<222> (1)..(12)

<400> 65  
Cys Val Leu Arg Asp Asp Leu Leu Glu Ala Arg Arg  
1 5 10

<210> 66  
<211> 26  
<212> PRT  
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<220>  
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<220>  
<221> SITE  
<222> (1)..(26)

<400> 66  
Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu

1	5	10	15
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Ala Arg Arg Pro Arg Ala His Glu Cys Leu  
20 25

<210> 67  
<211> 25  
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<220>  
<223> Description of Artificial Sequence: HA-1 peptide

<220>  
<221> SITE  
<222> (1)..(25)

<400> 67  
Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
1 5 10 15

Ala Arg Arg Pro Arg Ala His Glu Cys  
20 25

<210> 68  
<211> 12  
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<220>  
<223> Description of Artificial Sequence: HA-1 peptide

<220>  
<221> SITE  
<222> (1)..(12)

<400> 68  
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<210> 69  
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<220>  
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<220>  
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<400> 69

Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
 1 5 10 15

Ala

<210> 70  
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<220>  
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<220>  
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<400> 70  
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 1 5 10 15

Ala Arg Arg

<210> 71  
 <211> 21  
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<220>  
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<220>  
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<400> 71  
 Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
 1 5 10 15

Ala Arg Arg Pro Arg  
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<210> 72  
 <211> 23  
 <212> PRT  
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<220>  
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<220>

<221> SITE  
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<400> 72  
Gly Leu Glu Lys Leu Lys Glu Cys Val Leu Arg Asp Asp Leu Leu Glu  
1 5 10 15

Ala Arg Arg Pro Arg Ala His  
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<210> 73  
<211> 38  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence: KIAA0223  
sequence derived from a presumed HA-1 negative  
individual

<220>  
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<222> (1)..(38)

<400> 73  
gagtgtgtgt tgcgtgacga cctccttgag gcccgccg 38

<210> 74  
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sequence derived from a presumed HA-1 negative  
individual

<220>  
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positive individual



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Glu Cys Val Leu His Asp Asp Leu Leu Glu Ala Arg Arg

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Tyr Ile Gly Glu Val Leu Val Ser Val

1

5